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| NEWS 1 | Web Page for STN Seminar Schedule - N. America |
| NEWS 2 OCT 02 | CA/Caplus enhanced with pre-1907 records from Chemisches Zentralblatt |
| NEWS 3 OCT 19 | BEILSTEIN updated with new compounds |
| NEWS 4 NOV 15 | Derwent Indian patent publication number format enhanced |
| NEWS 5 NOV 19 | WPIX enhanced with XML display format |
| NEWS 6 NOV 30 | ICSD reloaded with enhancements |
| NEWS 7 DEC 04 | LINPADOCDB now available on STN |
| NEWS 8 DEC 14 | BEILSTEIN pricing structure to change |
| NEWS 9 DEC 17 | USPATOLD added to additional database clusters |
| NEWS 10 DEC 17 | IMSDRUGCONF removed from database clusters and STN |
| NEWS 11 DEC 17 | DGENE now includes more than 10 million sequences |
| NEWS 12 DEC 17 | TOXCENTER enhanced with 2008 MeSH vocabulary in MEDLINE segment |
| NEWS 13 DEC 17 | MEDLINE and LMEDLINE updated with 2008 MeSH vocabulary |
| NEWS 14 DEC 17 | CA/Caplus enhanced with new custom IPC display formats |
| NEWS 15 DEC 17 | STN Viewer enhanced with full-text patent content from USPATOLD |
| NEWS 16 JAN 02 | STN pricing information for 2008 now available |
| NEWS 17 JAN 16 | CAS patent coverage enhanced to include exemplified prophetic substances |
| NEWS 18 JAN 28 | USPATFULL, USPAT2, and USPATOLD enhanced with new custom IPC display formats |
| NEWS 19 JAN 28 | MARPAT searching enhanced |
| NEWS 20 JAN 28 | USGENE now provides USPTO sequence data within 3 days of publication |
| NEWS 21 JAN 28 | TOXCENTER enhanced with reloaded MEDLINE segment |
| NEWS 22 JAN 28 | MEDLINE and LMEDLINE reloaded with enhancements |
| NEWS 23 FEB 08 | STN Express, Version 8.3, now available |
| NEWS 24 FEB 20 | PCI now available as a replacement to DPCI |
| NEWS 25 FEB 25 | IFIREF reloaded with enhancements |
| NEWS 26 FEB 25 | IMSPRODUCT reloaded with enhancements |
| NEWS 27 FEB 29 | WPINDEX/WPIDS/WPIX enhanced with ECLA and current U.S. National Patent Classification |

NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3,
AND CURRENT DISCOVER FILE IS DATED 20 FEBRUARY 2008

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| NEWS HOURS | STN Operating Hours Plus Help Desk Availability |
| NEWS LOGIN | Welcome Banner and News Items |
| NEWS IPC8 | For general information regarding STN implementation of IPC 8 |

Enter NEWS followed by the item number or name to see news on that specific topic.

=> (acridine or dye or ethidium) (15A) (DNA or nucleic or RNA) (15A) (metal or toxicant or chromium or mercury or pollutant)

L1 4 FILE AGRICOLA
L2 9 FILE BIOTECHNO
L3 2 FILE CONFSCI
L4 1 FILE HEALSAFE
L5 21 FILE LIFESCI
L6 34 FILE PASCAL

TOTAL FOR ALL FILES

L7 71 (ACRIDINE OR DYE OR ETHIDIUM) (15A) (DNA OR NUCLEIC OR RNA) (15A) (M
ETAL OR TOXICANT OR CHROMIUM OR MERCURY OR POLLUTANT)

=> 17 and (displacement or competition or compete)

L8 0 FILE AGRICOLA
L9 0 FILE BIOTECHNO
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L12 3 FILE LIFESCI
L13 1 FILE PASCAL

TOTAL FOR ALL FILES

L14 4 L7 AND (DISPLACEMENT OR COMPETITION OR COMPETE)

=> d l14 ibib abs total

L14 ANSWER 1 OF 4 LIFESCI COPYRIGHT 2008 CSA on STN
ACCESSION NUMBER: 2007:140853 LIFESCI

TITLE: Synthesis, characterization and DNA-binding properties of
zinc(II) and nickel(II) Schiff base complexes
AUTHOR: Qi, Gao-fei; Yang, Zheng-yin*; Wang, Bao-dui
CORPORATE SOURCE: Lanzhou University, Lanzhou, 730000, P.R. China; E-mail:
yangzy@lzu.edu.cn
SOURCE: Transition Metal Chemistry [Transistion Met. Chem.],
(20070300) vol. 32, no. 2, pp. 233-239.
ISSN: 0340-4285.

DOCUMENT TYPE: Journal

FILE SEGMENT: N

LANGUAGE: English

SUMMARY LANGUAGE: English

AB A new ligand, 2-carboxybenzaldehyde-(4'-hydroxy)benzoylhydrazone(H
sub(2)L) and its Zn super(II) and Ni super(II) complexes have been
synthesized and characterized on the basis of elemental analyses, molar
conductivities, super(1)H-NMR, IR spectra and thermal analyses. In
addition, DNA-binding properties of these two metal
complexes were investigated using spectrometric titrations,
ethidium bromide displacement experiments, and viscosity
measurements. The results show that the two complexes, especially the Ni
super(II) complex, strongly bind with calf-thymus DNA, presumably via an
intercalation mechanism. The intrinsic binding constants of the Zn
super(II) and Ni super(II) complexes with DNA are 2.46 x 10 super(5) and
7.94 x 10 super(5)M super(-1), respectively.

L14 ANSWER 2 OF 4 LIFESCI COPYRIGHT 2008 CSA on STN

ACCESSION NUMBER: 93:6708 LIFESCI

TITLE: Fluorescence studies of dye displacement
from DNA by chromium(III) complexes:
Evidence for carcion induced DNA condensations.
AUTHOR: Kortenkamp, A.; O'Brien, P.; Beyersmann, D.
CORPORATE SOURCE: Sch. Pharm., Univ. London, 29/39 Brunswick Square, London

WC1N 1AX, UK
SOURCE: TOXICOL. ENVIRON. CHEM., (1992) vol. 35, no. 3-4, pp. 149-159.
DOCUMENT TYPE: Journal
FILE SEGMENT: X; N
LANGUAGE: English
SUMMARY LANGUAGE: English
AB The interactions of 10 different chromium(III) complexes with isolated calf thymus DNA have been analysed by studying the electronic and fluorescence spectra of intercalated ethidium bromide. Triply charged cationic complexes including: (Cr(urea) sub(6))Cl sub(3).3H sub(2)O, (Cr(1,10-phenanthroline) sub(3)) (ClO sub(4)) sub(3).2H sub(2)O, (Cr(2,2'-bipyridyl) sub(3)) (ClO sub(4)) sub(3).2H sub(2)O, (Cr(ethylenediamine) sub(3)) Cl sub(3) 3.5H sub(2)O and (Cr(NH₂ sub(3)) sub(6)) (NO sub(3)) sub(3) displaced the dye from DNA. Similar effects were observed in experiments using the non-intercalating dye bisbenzimidazole ("Hoechst 33258"). Singly charged cationic, anionic and uncharged chromium(III) complexes such as: cis-(Cr(1,10-phenanthroline) sub(2)Cl sub(2)) Cl.2H sub(2)O, cis-(Cr(2,2'-bipyridyl) sub(2)Cl sub(2)) Cl.2H sub(2)O, (Cr(glutathione) sub(2)) Na sub(2), (Cr(cysteine) sub(2))Na.2H sub(2)O and (Cr(glycine) sub(3)) were unable to displace both ethidium-bromide and bisbenzimidazole from DNA. There was no evidence for the formation of co-ordinate bonds between chromium(III) and DNA for any of the above complexes. The charge and type of ligand are important in controlling the interaction of chromium(III) with isolated DNA in vitro.

L14 ANSWER 3 OF 4 LIFESCI COPYRIGHT 2008 CSA on STN
ACCESSION NUMBER: 81:10387 LIFESCI
TITLE: Metal Mutagens and Carcinogens Effectively Displace Acridine Orange From DNA as Measured by Fluorescence Polarization.
AUTHOR: Richardson, C.L.; Verna, J.; Schulman, G.; Shipp, K.; Grant, A.D.
CORPORATE SOURCE: Meloy Lab., 6715 Electronic Dr., Springfield, VA 22151, USA
SOURCE: ENVIRON. MUTAGENESIS., (1981) vol. 3, no. 5, pp. 545-553.
DOCUMENT TYPE: Journal
FILE SEGMENT: N; G; X
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Displacement of 50% of the acridine orange is obtained with less than 0.5 mM concentrations of lead, manganese, cobalt, zinc, cadmium, nickel, iron, copper, and cis-platinum. In contrast, greater than 80 mM concentrations of lithium, sodium, and potassium are required to displace an equivalent amount of acridine orange from calf thymus DNA. Although cis-platinum shows the best DNA reactivity in this assay, the interaction between this metal and DNA does not occur immediately, as it does for the other metals tested. These results indicate that the acridine orange displacement assay provides a relative measure of the interaction of metals with DNA, and this DNA reactivity shows a positive correlation with mutagenic/carcinogenic potential.

L14 ANSWER 4 OF 4 PASCAL COPYRIGHT 2008 INIST-CNRS. ALL RIGHTS RESERVED. on STN
ACCESSION NUMBER: 2006-0532862 PASCAL
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TITLE (IN ENGLISH): Improved curve fitting procedures to determine equilibrium binding constants
AUTHOR: STOOTMAN Frank H.; FISHER Dianne M.; RODGER Alison;

CORPORATE SOURCE: ALDRICH-WRIGHT Janice R.
University of Western Sydney, PO Box 1797, Penrith
South DC, NSW 1797, Australia; The University of
Sydney, Centre for Heavy Metals Research, School of
Chemistry, The University of Sydney, NSW2006,
Australia; The University of Warwick, Coventry, CV4
7AL, United Kingdom

SOURCE: Analyst : (London. 1877. Print), (2006), 131(10),
1145-1151, 24 refs.

DOCUMENT TYPE: ISSN: 0003-2654 CODEN: ANALAO
Journal

BIBLIOGRAPHIC LEVEL: Analytic

COUNTRY: United Kingdom

LANGUAGE: English

AVAILABILITY: INIST-1036, 354000158753140120

AN 2006-0532862 PASCAL

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AB For ligand-biomacromolecule titration experiments it has been traditional practice to extract parameters such as the equilibrium binding constant K and the number of bases per ligand binding site n with relatively labour intensive methods, usually based on single wavelength data, such as the difference method by Rodger and Norden coupled together with a Scatchard plot. Presented in this paper are both the theory and a least squares fitting method to derive parameters such as K and n more directly from all spectral non-linear experimental data. Both the case of non competitive binding of a metal complex ligand to DNA and the case of displacement by a metal complex ligand of an ethidium marker attached to the DNA are considered. This work may be applied directly to reduce experimental data produced by a spectropolarimeter (for circular or linear dichroism) or a spectrophotometer (for fluorescence or UV-Vis spectroscopy).